



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,957	12/23/2003	Gordon Keith Grimes	03-0376	9374
24319	7590	09/15/2005		
LSI LOGIC CORPORATION 1621 BARBER LANE MS: D-106 MILPITAS, CA 95035			EXAMINER WALLING, MEAGAN S	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,957

Applicant(s)

GRIMES ET AL.

Examiner

Meagan S. Walling

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-16 is/are allowed.
- 6) ☒ Claim(s) 1,6,8,9 and 17 is/are rejected.
- 7) ☒ Claim(s) 2-5,7,10 and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/15/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 6, 8, 9, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by McCombs (US 5,778,194).

Regarding claim 1, McCombs teaches initiating a test mode within a host adapter board (column 11, lines 1-4); generating a clock signal for the host adapter board (column 6, lines 61-62); generating PCI signals within the host adapter board (column 11, lines 1-6); electronically selecting one or more PCI signal lines of the host adapter board (column 11, lines 4-6); and assessing timing of the one or more PCI signals from the PCI signal lines (see Figs. 4 and 5).

Regarding claim 6, McCombs teaches utilizing a jumper connected between the host adapter board and an external electronic device (column 10, lines 63-66).

Regarding claim 8, McCombs teaches utilizing a logic analyzer (column 11, lines 34-36).

Regarding claim 9, McCombs teaches utilizing a signal generated connected with the host adapter board (column 11, line 55).

Regarding claim 17, McCombs teaches means for initiating a test mode within a host adapter board (column 11, lines 1-4); means for generating a clock signal for the host adapter board (column 6, lines 61-62); means for generating PCI signals within the host adapter board (column 11, lines 1-6); means for electronically selecting one or more PCI signal lines of the

Art Unit: 2863

host adapter board (column 11, lines 4-6); and means for assessing timing of the one or more PCI signals from the PCI signal lines (see Figs. 4 and 5).

Allowable Subject Matter

2. Claims 2-5, 7, 10, and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the indication of allowability of claim 2 is the inclusion of the limitation of utilizing addresses within memory of the host adapter board to select the one or more PCI signal lines. It is this limitation in the claimed combination that has not been found, taught, or suggested in the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 5 is the inclusion of the limitation of utilizing an I/O controller of the host adapter board. It is this limitation in the claimed combination that has not been found, taught, or suggested in the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 7 is the inclusion of the limitation of cycling through addresses within memory of the host adapter board. It is this limitation in the claimed combination that has not been found, taught, or suggested in the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 10 is the inclusion of the limitation of assessing one or both of slew rate and clock-to-signal valid of the PCI signals. It is

Art Unit: 2863

this limitation in the claimed combination that has not been found, taught, or suggested in the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 18 is the inclusion of the limitation of an I/O controller of the host adapter board, the I/O controller further comprising internal memory for storing addresses of the one or more PCI signal lines. It is this limitation in the claimed combination that has not been found, taught, or suggested in the prior art that makes these claims allowable.

The primary reason for the indication of allowability of claim 20 is the inclusion of the limitation of determining one or both of clock-to-signal valid and slew rate for the one or more PCI signal lines. It is this limitation in the claimed combination that has not been found, taught, or suggested in the prior art that makes these claims allowable.

3. Claims 11-16 are allowed.

The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claim 11 is the inclusion of the limitation of a host adapter board responsive to a test mode initialization to generate PCI signals within the host adapter board, the host adapter board having internal memory for storing addresses for PCI signal lines of the host adapter board, the host adapter board adapted to receive an external clock signal and being configured to select one or more of the PCI signal lines, based on the addresses, for output from host adapter board; and a PCI test controller for assessing PCI signals from the output and relative to the clock signal. It is this limitation in the claimed combination that has not been found, taught, or suggested in the prior art that makes these claims allowable.

Art Unit: 2863

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meagan S. Walling whose telephone number is (571) 272-2283. The examiner can normally be reached on Monday through Friday 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msw

BRYAN BUI
PRIMARY EXAMINER

